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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Rec'd PCT/PTO 15 DEC 2004



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Applicant's or agent's file reference 22188/06651	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/US 03/19133	International filing date (day/month/year) 17.06.2003	Priority date (day/month/year) 17.06.2002
International Patent Classification (IPC) or both national classification and IPC G01N29/00		
Applicant SWAGelok COMPANY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 07.01.2004	Date of completion of this report 11.10.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Uttenhaler, E Telephone No. +49 89 2399-7568 

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**INTERNATIONAL PRELIMINARY
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International application No. **PCT/US 03/19133**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-17 as originally filed

Claims, Numbers

1-13 as originally filed

Drawings, Sheets

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-13
	No: Claims	
Inventive step (IS)	Yes: Claims	2-4
	No: Claims	1,5-13
Industrial applicability (IA)	Yes: Claims	1-13
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial
applicability; citations and explanations supporting such statement**

1. Cited documents

The following documents are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

- D1: US-B-6 360 6091 (WOOH SHI-CHANG) 26 March 2002 (2002-03-26)
- D2: WO 99/31499 A (TRICORN GROUP PLC ; MECON LIMITED (GB);
GORMAN MICHAEL (GB); HARPER MA) 24 June 1999 (1999-06-24)
- D3: US-A-3 218 845 (WORLTON DANIEL C) 23 November 1965 (1965-11-23)
- D4: DEUTSCH V ET AL: "3.2 Ultraschallprüfgeräte"
ULTRASCHALLPRUEFUNG: GRUNDLAGEN UND INDUSTRIELLE
ANWENDUNGEN, 1997, pages 55-73, XP002279058 BERLIN
HEIDELBERG NEW YORK
- D5: SADOWSKY J: "Investigation of signal characteristics using the continuous
wavelet transform" JOHNS HOPKINS APL TECH. DIG. (USA), JOHNS
HOPKINS APL TECHNICAL DIGEST, JULY-SEPT. 1996, JOHNS HOPKINS
UNIV. APPL. PHYS. LAB, USA, vol. 17, no. 3, July 1996 (1996-07), pages
258-269, XP002286231 ISSN: 0270-5214

2. Inventive Step (Art. 33(3) PCT)

Claim 1:

Claim 1 do not appear to fulfill the requirements of the PCT set out in Article 33(3) with respect to an inventive step:

D1, which is considered to represent the most relevant state of the art, discloses a an apparatus suitable for evaluating a fitting assembly of the type having a conduit and a fluid coupling installed thereon, comprising :
a source (18,22, fig. 1A, D1) adapted to apply mechanical energy waves into the conduit (18,22, fig. 1A and col. 8, lines 30-32, D1); said source receiving reflected energy waves and producing a signal related thereto (18,22, fig. 1A, D1); and
an analyser (14, fig. 1A and col. 5, lines 40-45, D1) that determines a

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characteristic of the conduit, such as distances and location of discontinuities, as a function of said reflected portions of said energy waves (abstract, D1).

Thus, the subject-matter of claim 1 differs in that the apparatus is a hand-held tool and in that the fitting assembly installed on the conduit is investigated.

The problem to be solved by the present invention may be regarded as determining a characteristic of the fitting assembly.

It is obvious for the skilled person that the apparatus disclosed in D1 can be adapted to solve this technical problem. He would therefore provide an analyser that produces an output for a characteristic of the fitting assembly, e.g. the position of an end of the conduit in the fluid coupling, which comes merely to the determination of a distance within the conduit.

Moreover, it is obvious for the skilled person that such an apparatus can be designed as a hand-held apparatus as shown on page 70, last paragraph and figure 3.34, D4.

Therefore, **claim 1 is not inventive.**

Dependent claims:

The dependent claims 5-13 appear to relate to mere design modifications, consequential features, conventional features or features already present in the arrangements of D1 to D5 and, therefore, do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT with respect to an inventive step.

3. Miscellaneous

- a. The **prior art D1, D2 and D3 is not identified in the description** and the relevant background art disclosed therein contrary to Rule 5.1a(ii) PCT
- b. The independent claim 1 is not in the **two-part form** as required by Rule 6.3(b) PCT.
- c. The features of the claims are not provided with **reference signs** placed in parentheses to increase the intelligibility of the claims (Rule 6.2(b) PCT).

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